Jeremiah W. (Jay) Nixon
Governor

MISSOURI
Department of Economic Development

David Kerr
Director

September 9, 2011

The Honorable Brad Lager
201 W Capitol Ave., Rm. 422
Jefferson City, Missouri 65101

Dear Senator Lager:

Enclosed per your September 7 request is an analysis of two hypothetical projects that would be eligible for the Aerotropolis Trade Incentive Tax Credit proposed in the Senate Committee Substitute for Senate Bill 8. The analysis was performed by the Missouri Economic Research and Information Center (MERIC) within the Missouri Department of Economic Development utilizing the Regional Economic Model Inc. (REMI) model.

The first page of the enclosed analysis discusses the assumptions used by MERIC in performing the requested analysis. The two hypothetical projects assume (1) a 400,000 square foot warehouse facility directly employing 160 workers with an initial capital investment of $10.25 million to construct and equip the facility, and (2) a manufacturing facility directly employing 40 workers with an initial capital investment of $4.74 million to construct and equip the facility. The analysis assumes construction of the facilities beginning in 2011 and commencement of operations in 2013. Each facility is assumed to be located in St. Louis County.

The second page of the enclosed analysis is a chart showing the projected benefits and costs to the State of Missouri as a result of the two hypothetical projects modeled over a ten and fifteen-year period. The benefits to the State of Missouri as a result of the projects include the new State tax revenue (labeled "State New GR"), the new economic output for the State (labeled "State GDP"), and the number of new jobs created over the defined period (labeled "D + ID Jobs"). The costs to the State of Missouri from the hypothetical projects include the cost of providing a 30% or 20% tax credit under the Aerotropolis Trade Incentive Tax Credit (labeled "CH 30%" and CH 20%"), as well as additional incentives available to the projects under the existing Missouri Quality Jobs Program (labeled "MQJ").

As I understand your request, a key metric in this analysis is the relationship between the benefit of the new State tax revenue generated by the projects in relationship to the cost to the State from its investment in the projects. That "benefit/cost" relationship is represented as a ratio in the right column of each of the four scenarios (labeled "B/C Ratio"). Where the benefit/cost ratio is greater than 1.0, the amount of new State tax revenue generated by the project exceeds the amount of the incentives provided. Where the benefit/cost ratio is less than 1.0, the cost of the incentive provided is greater than the amount of new tax revenue generated by the project. MERIC's findings with respect to each of the hypothetical projects is discussed below.

<u>Warehouse Facility Project (160 Direct Jobs, $10.25M Capital Investment)</u>

Benefits
As indicated in the chart, over ten years, the hypothetical warehouse project analyzed is projected to generate $2,997,516 in new State tax revenue, a $125,618,208 increase in the State's overall economy, and the creation of an average of 215 new jobs. Over fifteen years, the hypothetical warehouse project is projected to generate $3,817,347 in new State tax revenue, a $198,956,103 increase in the State's overall economy, and the creation of an average of 215 new jobs annually.

Costs
As indicated in the chart, the cost of the Aerotropolis Incentives for the project as currently proposed would be $2,803,677 if the project were to receive the 30% tax credit and $1,869,118 if the project were to receive the 20% tax credit. If the project were also to receive Missouri Quality Jobs benefits, the cost would increase to $3,528,348 if the project were to receive the 30% Aerotropolis tax credit and $2,593,789 if the project were to receive the 20% Aerotropolis tax credit.

Benefit/Cost Ratio
If the project receives the 30% Aerotropolis tax credit and no additional State incentives, the benefit/cost ratio is 1.07 projected over a ten year period and 1.36 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $1.07 in new State tax revenue as a result of the project over ten years and $1.36 over fifteen years.

If the project receives the 30% Aerotropolis tax credit along with incentives under Missouri Quality Jobs, the benefit/cost ratio is .85 projected over a ten year period and 1.08 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $.85 in new State tax revenue as a result of the project over ten years and $1.08 over fifteen years.

If the project receives the 20% Aerotropolis tax credit and no additional State incentives, the benefit/cost ratio is 1.60 projected over a ten year period and 2.04 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $1.60 in new State tax revenue as a result of the project over ten years and $2.04 over fifteen years.

If the project receives the 20% Aerotropolis tax credit along with incentives under Missouri Quality Jobs, the benefit/cost ratio is 1.16 projected over a ten year period and 1.47 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $1.16 in new State tax revenue as a result of the project over ten years and $1.47 over fifteen years.

<u>Manufacturing Facility Project (40 Direct Jobs, $4.74M Capital Investment)</u>

Benefits
As indicated in the chart, over ten years, the hypothetical manufacturing project analyzed is projected to generate $1,835,637 in new State tax revenue, a $79,782,023 increase in the State's overall economy, and the creation of an average of 75 new jobs. Over fifteen years, the hypothetical warehouse project is projected to generate $2,695,458 in new State tax revenue, a $133,973,586 increase in the State's overall economy, and the creation of an average of 75 new jobs annually.

Costs
As indicated in the chart, the cost of the Aerotropolis Incentives for the project as currently proposed would be $1,295,449 if the project were to receive the 30% tax credit and $863,633 if the project were to receive the 20% tax credit. If the project were also to receive benefits under Missouri Quality Jobs, the cost to the State would increase to $1,511,509 if the project were to receive the 30% Aerotropolis tax credit and $1,079,692 if the project were to receive the 20% Aerotropolis tax credit.

Benefit/Cost Ratio
If the project receives the 30% Aerotropolis tax credit and no additional State incentives, the benefit/cost ratio is 1.42 projected over a ten year period and 2.08 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $1.42 in new State tax revenue as a result of the project over ten years and $2.08 over fifteen years.

If the project receives the 30% Aerotropolis tax credit along with incentives under Missouri Quality Jobs, the benefit/cost ratio is 1.21 projected over a ten year period and 1.78 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $1.21 in new State tax revenue as a result of the project over ten years and $1.78 over fifteen years.

If the project receives the 20% Aerotropolis tax credit and no additional State incentives, the benefit/cost ratio is 2.13 projected over a ten year period and 3.12 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $2.13 in new State tax revenue as a result of the project over ten years and $3.12 over fifteen years.

If the project receives the 20% Aerotropolis tax credit along with incentives under Missouri Quality Jobs, the benefit/cost ratio is 1.70 projected over a ten year period and 2.50 projected over a fifteen year period. This means that for each tax dollar the State invests in the project, the State receives $1.70 in new State tax revenue as a result of the project over ten years and $2.50 over fifteen years.

Please let me know if you have any questions or would like to discuss this analysis further.

Sincerely,

David D. Kerr

David D. Kerr
Director

Enclosure

cc: The Honorable Robert Mayer
The Honorable Victor Callahan
The Honorable Steven Tilley
The Honorable Mike Talboy

Preliminary Project Scenario Analysis

China Hub Tax Credit and Missouri Quality Jobs

ASSUMPTIONS

- Two projects, a Warehouse Facility and Machinery Manufacturing Facility operation, were modeled in St. Louis County for this analysis. Construction starts in 2011 and full operations begin in 2013.

- Warehouse Facility: Assumes one hundred and sixty (160) operational jobs are associated with the Warehouse Facility scenario to model a 400,000 square foot building with $10.25M in initial capital investment.
  - Based on a review of distribution space around Chicago O'Hare International Airport, an assumption of 400,000 Sq. Ft. represents a mid-to-larger sized facility.
  - The assumption of 160 jobs for a 400,000 Sq. Ft. facility equates to 1 job per 2,500 Sq. Ft., which is based on a review of a 2010 commercial real estate association report and a brief evaluation of recent distribution center announcements throughout the U.S.

- Manufacturing Facility: Assumes forty (40) operational jobs associated with a Machinery Manufacturing Facility with $4.74M in initial capital investment.
  - Assumption of 40 jobs is based on an analysis of Department of Economic Development project tracking numbers for manufacturing companies over the past five years. A large number of projects allowed for a central tendency of 40 jobs per facility to be developed for modeling purposes.

- Estimated investment amounts were developed using analysis of REMI economic model industry data. However, project-specific investment can vary greatly depending on specific project details and location.

- Scenario results are in present dollar values, assume wage growth based on inflation, and represent cumulative state totals.

- State Incentives: The following state incentives were utilized for the cost factor in each scenario:
  - *China Hub:* Provides 30% or 20% of initial investment back to the company once new operational jobs begin in year 2013. Company receives 6% a year for 5 years up to 30%, or receives 4% each year for 5 years up to 20%.

  - *Missouri Quality Jobs:* Based on average 2010 industry and county wages in St. Louis County, the Warehouse and Machinery Manufacturing scenarios qualify for 3 years of Missouri Quality Jobs (MQJ) incentives. St. Louis County average industry wages of $49,000 for Warehouse and $55,000 for Machinery Manufacturing were used to develop incentive estimates, with an annual inflationary increase of 3 percent.

Warehouse Project Scenario

(160 Direct Jobs and Initial Capital Investment of $10.25M)

10-YR BENEFITS (TO THE ECONOMY)		**10-YR COSTS** (IN STATE INCENTIVES)			
State New GR*:	**$2,997,516**	China Hub (CH 30%):	$2,803,677	B/C Ratio:	1.07
State GDP**:	**$125,618,208**	CH (30%) + MQJ:	$3,528,348	B/C Ratio:	0.85
D + ID Jobs***:	**215**	China Hub (CH 20%):	$1,869,118	B/C Ratio:	1.60
		CH (20%) + MQJ:	$2,593,789	B/C Ratio:	1.16

15-YR BENEFITS (TO THE ECONOMY)		**15-YR COSTS** (IN STATE INCENTIVES)			
State New GR*:	**$3,817,347**	China Hub (CH 30%):	$2,803,677	B/C Ratio:	1.36
State GDP**:	**$198,956,103**	CH (30%) + MQJ:	$3,528,348	B/C Ratio:	1.08
D + ID Jobs***:	**215**	China Hub (CH 20%):	$1,869,118	B/C Ratio:	2.04
		CH (20%) + MQJ:	$2,593,789	B/C Ratio:	1.47

Machinery Manufacturing Project Scenario

(40 Direct Jobs and Initial Capital Investment of $4.74M)

10-YR BENEFITS (TO THE ECONOMY)		**10-YR COSTS** (IN STATE INCENTIVES)			
State New GR*:	**$1,835,637**	China Hub (CH 30%):	$1,295,449	B/C Ratio:	1.42
State GDP**:	**$79,782,023**	CH (30%) + MQJ:	$1,511,509	B/C Ratio:	1.21
D + ID Jobs***:	**75**	China Hub (CH 20%):	$863,633	B/C Ratio:	2.13
		CH (20%) + MQJ:	$1,079,692	B/C Ratio:	1.70

15-YR BENEFITS (TO THE ECONOMY)		**15-YR COSTS** (IN STATE INCENTIVES)			
State New GR*:	**$2,695,458**	China Hub (CH 30%):	$1,295,449	B/C Ratio:	2.08
State GDP**:	**$133,973,586**	CH (30%) + MQJ:	$1,511,509	B/C Ratio:	1.78
D + ID Jobs***:	**75**	China Hub (CH 20%):	$863,633	B/C Ratio:	3.12
		CH (20%) + MQJ:	$1,079,692	B/C Ratio:	2.50

**State New General Revenue (GR) represents the cumulative total of new general revenue benefits over the 10 to 15 Yr. periods*
***State Gross Domestic Product (GDP) represents the cumulative new economic output in the state over the 10 to 15 Yr. periods*
****Direct (D) + Indirect (ID) annual average new jobs created after the facility is placed in operation*